

406 East Park Avenue, Suite 2 Anaconda, Montana 597 1 1 (406) 563-2700

TECHNICAL MEMORANDUM

TO: Lynda Deschambault, U.S. EPA

FROM: Mike Johnson, P.E.

SUBJECT: February 1, 2017 – Field Observations

DATE: February 3, 2017

Introduction

This Technical Memorandum has been prepared by Copper Environmental Consulting (CEC) to summarize field observations conducted on February 1, 2017. Field observations were conducted to evaluate the capacity of the Acid Drainage Storage Ponds and observe Leviathan Creek j ust downstream of the beaver dam / beaver pond complex for indications of beaver dam failure.

Acid Drainage Storage Ponds Capacity

The pond water (snow) levels in Pond 1, Pond 2S, Pond 2N, Pond 3, and Pond 4 were all below the overflow structures as seen in the Photographs 1 through 5.



Photograph 1: Pond 1



Photograph 2: Pond 2S



Photograph 3: Pond 2N



Photograph 4: Pond 3



Photograph 5: Pond 4

Beaver Dam Failure

Field observations of the Leviathan Creek culvert downstream of the beaver dam / beaver pond complex were conducted to determine if there was indication of beaver dam failure. Field staff did not observe any debris restricting flow or any indication of beaver dam failure as seen in Photographs 6 and 7.



Photograph 6: Leviathan Creek Culvert Looking Downstream



Photograph 7: Leviathan Creek Culvert Looking Upstream

Conclusions

Field observations conducted during the February 1, 2017 site visit indicated that pond storage is available and that there was no indication of debris restricting flow at the Leviathan Creek culvert.